PROJECT INSPECTOR & ASSISTANT INSPECTOR DUTIES AND PERFORMANCE

IR A-8

Reference: California Building Standards Administrative Code (Title 24, Part 1) Sections 4-211, 4-333, 4-334, 4-336, 4-337, 4-342, & 4-343 California Education Code, Sections 17309 & 81141 Revised 06/01/06 Revised 1-25-02 Issued 09-01-99

This Interpretation of Regulation (IR) is intended for use by the Division of the State Architect (DSA) staff, and as a resource for design professionals, to promote more uniform statewide criteria for plan review and construction inspection of projects within the purview of DSA. This IR indicates an acceptable method for achieving compliance with applicable codes and regulations, although other methods proposed by design professionals may be considered by DSA.

This IR is reviewed on a regular basis and is subject to revision at any time. Please check the DSA web site for currently effective IR's. Only IR's listed in the document at http://www.dsa.dgs.ca.gov/Publications/default.htm (click on "DSA Interpretations of Regulations Manual") at the time of plan submittal to DSA are considered applicable.

Purpose: This IR provides clarification of the duties of school construction project inspectors and assistant inspectors as required by the California Building Standards Code (Title 24, Part 1). The IR also describes the performance rating process utilized by DSA to evaluate inspectors for approval on future school construction projects.

Section 1 - REQUIRED DUTIES of the PROJECT INSPECTOR

The project inspector must perform specific duties in accordance with Title 24, Part 1 (Sections 4-333, and 4-342). The project inspector acts under the direction of the design professional in general responsible charge and is subject to supervision by DSA. The project inspector does not have the authority under Title 24 to direct the contractor in the execution of the work, nor to stop the work of construction.

The project inspector's responsibilities include:

- A thorough understanding of all requirements of the construction documents.
- Inspection of all portions of the construction for compliance with the requirements of the DSA approved construction documents.
- Identification, documentation, and reporting of deviations in the construction from the requirements of the DSA approved construction documents.
- Submittal of verified reports (<u>Form DSA-6</u>). At the conclusion of the project any outstanding deviations must be noted on the Form DSA-6.

Seven Categories of Code-Prescribed Duties of the Project Inspector

The code-prescribed duties of the project inspector have been organized into the following seven categories. The inspector's performance in each of these categories serves as the basis for the DSA field engineer's rating of the inspector (see Section 2 on page 5 of this IR).

1. Inspector's Job File

The inspector must maintain approved (DSA-stamped and initialed) construction documents at the job-site in an organized, readily accessible manner. The inspector must also maintain any other construction documents or directives received from the responsible design professional(s).

The following list of documents and codes must be maintained at the job-site, and available for review by DSA representatives, during construction:

- Building Codes: Title 24, Part 1 (Administrative Code); Title 24, Part 2, Volumes 1, 2, and 3 (Building Code); Title 24, Part 3 (Electrical Code); Title 24, Part 4 (Mechanical Code); Title 24, Part 5 (Plumbing Code) and Title 24, Part 6 (Energy Code). The code edition must be as referenced on the DSA approved plans and specifications.
- DSA approved plans and specifications.
- DSA approved addenda.
- DSA approved deferred approval documents.
- DSA approved Field Change Documents.
- DSA approved change orders.
- A copy of shop drawings, samples, and approved submittals.
- Test and Inspection List (<u>Form SSS-103-1</u>).
- Test and special inspection reports.
- Deviation reports and logs.
- Daily inspection reports.
- Semi-monthly reports.
- Any other documents or directives received from the responsible design professional(s).

2. Inspector's Comprehension of the Construction Documents

The inspector must study and fully comprehend the requirements of the construction documents in order to provide competent inspection of the work. It is necessary for the inspector to possess a thorough understanding of the requirements of the plans and specifications *before* that portion of the work is performed.

The inspector must:

- Consult the responsible design professional(s) to resolve any uncertainties in the inspector's comprehension of the plans and specifications prior to construction of that portion of the work.
- Review requirements for each phase of the construction with the contractor prior to commencing that phase of the work. Good communications will prevent construction errors from occurring.
- Readily identify non-compliant work as the construction progresses, to facilitate prompt corrective action.
- Verify code-compliant implementation of the materials testing and special inspection program.

Title 24, Part 1, Section 4-343, specifies that the contractor must direct inquiries regarding document interpretation (including Requests for Information or RFI's) to the design professional in general responsible charge, through the inspector. This code provision requires the contractor to involve the inspector in the interpretation and clarification of the construction documents.

3. Continuous Inspection of the Work

Continuous inspection means complete and timely inspection of every part of the work. Title 24, Part 1 requires prompt inspection of the work as it progresses. Title 24, Part 1 also requires that prompt verbal notification be made to the contractor of any deviation, so that the deviation can be immediately corrected.

Work such as concrete work or masonry work which can be inspected only as it is placed requires the <u>constant</u> presence of the inspector. Certain types of work which can be completely inspected after the work is installed may be carried out while the inspector is not present, provided that the inspector promptly identifies and reports all deviations.

The project inspector must have personal knowledge of the construction obtained through the project inspector's own physical inspection of the work in all stages of its progress. When special inspectors or approved assistant inspectors are used on a project, the project inspector's personal knowledge may include that knowledge obtained from these individuals. The project inspector must keep a log of time spent on site.

4. Records of Inspections

The inspector must maintain detailed records of all inspections. The inspector's records must provide a comprehensive and timely documentation of the inspected work, promptly identifying all compliant and non-compliant construction. These records must be readily accessible and maintained in an organized manner. The following is a list of the inspection records that must be maintained at the job-site:

- A systematic record of the inspection of all work required by the construction documents. Marking properly completed work on a set of construction documents is a recommended method to verify that the requirements of the plans and specifications have been met. The inspector must also record the resolution of reported deviations.
- Construction Procedure Records per Title 24, Part 1, Section 4-342(6), including but not limited to concrete placement operations, welding operations, pile penetration blow counts, and other records specified on the approved construction documents.
- Log of project inspector's and assistant inspector's time spent on-site. DSA may require verification from the inspector of time spent at the job-site during all phases of the work.

5. Communications Required of the Inspector

The inspector must, during the course of construction, provide specific code-prescribed notices and reports to the responsible design professional(s), DSA, the school district, and the contractor. The inspector must maintain records of all communications. These records must be readily accessible and maintained in an organized manner. The date and recipients of all communications must be clearly indicated.

The inspector is required to provide the following communications during the course of a construction project:

• **Notifications to DSA** as required by Title 24, Part 1, Section 4-342 (b) 5; including start of work, minimum 48 hours prior to completion of foundation trenches, minimum 48 hours prior to first concrete placement, and when work is suspended for more than two weeks. Notifications shall be made by telephone or e-mail.

• Inspector's Semi-Monthly Reports (see Title 24, Part 1, Section 4-337). The project inspector must make semi-monthly reports (on the 1st and 15th of every month) on the progress of construction. The semi-monthly report must be submitted to the design professional in general responsible charge and the structural engineer; a copy must be sent to DSA and the school district.

A semi-monthly report must be prepared in accordance with DSA's *Guidelines for Format of Project Inspector's Semi-Monthly Report for School Construction Projects*. The guideline is available on-line at www.dsa.dgs.ca.gov (click on "Forms"), or at DSA regional offices.

Note for single-story relocatable building projects: At the discretion of the responsible design professional(s), the inspector may submit the DSA standard form <u>Checklist for Site Inspection of Relocatable Buildings</u> in lieu of semi-monthly reports. The checklist is to be submitted at the completion of the work. The checklist is available on-line at <u>www.dsa.dgs.ca.gov</u> (click on Forms), or at DSA regional offices.

- **Deviation Notices** (see Title 24, Part 1, Section 4-342 (b) 7). When the inspector identifies deviations from the approved plans and specifications, the inspector must verbally notify the contractor. If the deviation is not immediately corrected, the inspector is required to promptly issue a written notice of deviation to the contractor, with a copy sent to the responsible design professional(s), and DSA. The status and resolution of all deviations must be documented on semi-monthly reports.
- Record of Communications to the Responsible Design Professional(s) All uncertainties in the inspector's or contractor's comprehension of the documents must be reported in writing to the responsible design professional(s).
- Verified Reports (Form DSA-6) (refer to Title 24, Part 1, Section 4-336). The project inspector shall submit verified reports directly to DSA within seven days of any of the following:
- 1) Work on the project is suspended for a period of more than one month.
- 2) The services of the inspector are terminated for any reason.
- 3) DSA requests a verified report.
- 4) At the time of occupancy of any building involved in a project (including alterations work).
- 5) The entire project is complete.

The verified reports shall clearly describe all non-compliant work including work done in accordance with change orders that are pending DSA approval.

6. Inspector's Monitoring of the Materials Testing & Special Inspection Program

The inspector is responsible, under the direction of the design professional in general responsible charge, for monitoring the work of any special inspectors and materials testing laboratories to ensure that all materials testing & special inspections required for the project are satisfactorily completed in accordance with the DSA approved documents.

The project inspector must monitor the following aspects of the Materials Testing & Special Inspection Program:

When DSA approval for special inspectors is required, the project inspector must

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identify and report any special inspectors on the job-site that are not DSA-approved.

- The project inspector must verify that the materials testing lab and special inspectors have received sufficient advance notification to perform the required material sampling or special inspection.
- The project inspector is responsible for verifying that all required material sampling and special inspections have been performed. The project inspector is also responsible to observe any special inspector's on-site presence and performance of duties, the special inspector's documentation of complying and non-complying work, and issuance of deviation notices.
- The project inspector is responsible for reviewing all materials test and special inspection reports. The project inspector must report the status and resolution of deviations reported by any materials testing lab or special inspector on semi-monthly reports.

7. Monitoring of Assistant Inspector(s)

The project inspector must provide technical quidance to assistant inspector(s) and must verify the assistant inspector's comprehension of the construction documents. The project inspector must also monitor the assistant inspector's performance, verifying that the assistant inspector is properly checking the construction, recording inspections, and performing other assigned duties.

The project inspector must ensure that any assistant inspector is performing the duties indicated on the assistant inspector's approved Form DSA-5A. See IR A-12.

The project inspector must provide continuous on site supervision of all assistant inspectors.

Section 2 - DSA's RATING of the INSPECTOR'S PERFORMANCE

The DSA field engineer makes site visits at various stages of the project construction, observing the project inspector's and assistant inspector(s) execution of code-prescribed duties. At the final site visit, the DSA field engineer will complete a Project Inspector's Performance Rating for the project inspector and an Assistant Inspector's Performance Rating for any assistant inspector(s). These forms identify seven categories (six for assistant inspectors) of code-prescribed duties as outlined in Section 1 of this IR.

The performance rating is used by DSA as a basis for approval of the project inspector or assistant inspector on future projects. The scope of the performance rating is limited to the inspector's execution of code-prescribed duties on a specific project. An overall rating of "unsatisfactory" will adversely affect the inspector's qualification for approval by DSA on future projects.

The DSA Field Engineer's Role During Construction - The Field Trip Note

The responsibilities of the DSA field engineer include observing the project inspector's execution of code-required duties. During each visit to the job-site, the DSA field engineer will document on the DSA Field Trip Note improper or incomplete execution of the inspector's code-prescribed duties. The field engineer will also provide an acceptable process to correct inadequate execution of the inspector's code-prescribed duties. Copies of the Field Trip Note will be distributed to the inspector, the design professional in general responsible charge, and the school district.

DSA's Rating of the Inspector - The Project Inspector's Performance Rating Form

At the final visit to the job-site, the DSA field engineer will complete the <u>Project Inspector's Performance Rating</u> (Form DSA-180-5.1) for project inspectors, or the <u>Assistant Inspector's Performance Rating</u> (Form DSA-180-5.1a) for assistant inspectors. These forms are available on-line at <u>www.dsa.dgs.ca.gov</u> (click on <u>Forms</u>) or at DSA regional offices.

RATING THE INSPECTOR.S PERFORMANCE OF CODE-PRESCRIBED DUTIES

The DSA field engineer must make a determination of "satisfactory," "needs improvement," or "unsatisfactory" performance in each of the seven categories (six for assistant inspectors) indicated on the rating form.

The rating in each category is based on the observations documented by the DSA field engineer on the Field Trip Note(s) and/or on a review of the inspector's reports. Documented problems with the inspector's performance that were satisfactorily addressed during the course of construction can result in a rating of "satisfactory."

Any documented improper or incomplete execution of code-prescribed duties that have not been satisfactorily addressed will result in an "unsatisfactory" or "needs improvement" rating.

OVERALL RATING OF THE INSPECTOR

The DSA field engineer will also give the inspector an overall rating of "satisfactory," "needs improvement," or "unsatisfactory" performance on the rating form. The overall rating is based on the ratings the inspector received in the seven categories (six for assistant inspectors). An overall rating of "satisfactory" results from satisfactory ratings in each of the categories. An unsatisfactory rating in one or more of the categories may be justification for an overall rating of "unsatisfactory."

The DSA field engineer will communicate the rating in each category and the overall rating to the inspector. The inspector can, upon request and by scheduled appointment, review the ratings with the DSA supervisor or regional manager at the DSA regional office. "Unsatisfactory" overall ratings require the review and signature of the DSA supervising engineer and DSA regional manager prior to placement in the inspector's personal file.

DSA's Inspector File

The *Inspector's Performance Rating* is confidential and will be maintained in the inspector's personal and confidential file at the DSA regional office that provided construction oversight for the project. Access to these files will only be permitted to DSA personnel and the individual inspector.

An inspector may review this personal file by scheduling an appointment with the appropriate DSA supervising engineer or regional manager. The inspector must present a photo ID. The inspector may not make copies of the file contents, nor at any time will the file be allowed out of the DSA regional office, unless subpoenaed by a court.